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PASTORAL PEOPLES: A VANISHING BREED?

by Andrew Williams

DETROIT, IDRC -- They are proud, independent and free, content to drive their herds across a desolate landscape in search of pasture. But, like North American cowboys with whom they share these traits, pastoral nomads such as the Bedouin of Arabia and the Fulani of Nigeria are a disappearing breed, warns rural sociologist, Dr. Jene Gilles.

Addressing the American Association for the Advancement of Science's annual meeting held this year in Detroit, U.S.A., the University of Missouri social scientist talked of a "pastoral crisis" in many developing countries.

For thousands of years nomadic people have grazed their herds by moving them over large areas of the arid, marginal land they occupy. Goats, sheep, camels and cattle have thus been raised on sparse vegetation that would otherwise be of no use to humans.

But in many places governments are restricting the mobility of nomads, limiting the territory they may use and pushing them into a more conventional sedentary life.

"As a result, the ecological viability of traditional pastoralism and of the land itself are threatened," says Gilles.

James Riddell, a University of Wisconsin land-tenure specialist, agrees. He says that although fenced-in rangeland may suit western ranchers, it clashes with both the climate and the centuries-old migratory herding traditions of western Africa.

Despite this, international livestock consultants have tried for 60 years to impose western-style, sedentary range management on western Africa's nomadic herders.

"The World Bank and the U.S. Agency for International Development (USAID) have spent \$650 million on livestock programs on the continent -- without success," claims Riddell.

Imposing a system of exclusive rights to restricted grazing areas does not take into account the tremendous variations in rainfall in the area, he says.

"A piece of land may offer good grazing for a few years, then there will be none. Unlike the western U.S., western Africa has no snow melt. If there's no rain, there's no grass. There are also periodic migrations of disease vectors such as the tsetse fly that drive out livestock producers."

Where nomadic herdsman are free each year to move to those areas that have received rainfall, they assure sustenance for both their animals and themselves, as well as reduce pressure on vegetation in drought-stricken areas.

In western North America, where livestock grazes on the same lands all year long, stocking rates are set to the average yearly precipitation rate. At these rates some overgrazing may occur in dry years, but the conservative use in years of above-average precipitation is assumed to compensate.

Range scientists have long realized that one way to protect the fragile ecology of marginal lands while achieving the maximum production is to maintain a low number of animals. But most nomads are reluctant to reduce the size of their herds because they feel this would threaten human survival.

"Resistance to range management by pastoralists and their culture has generally sabotaged attempts to improve or protect Near East and African pastoral production systems," says Dr. Gilles. "But without better management it is difficult or impossible to improve productivity."

An old story

Similar problems were faced in the plains of North America in the 1920s and 1930s, and met much the same resistance from ranchers, then. Overgrazing, poor

agricultural practices, and drought led to the Dust Bowl. But it was the tremendous resources of the government, combined with the political weakness of the ranchers, rather than the latter's desire for new approaches, that led to the triumph of scientific range management, he points out.

Range management has had some success stories in developing countries. For instance, a southern Tunisian project introduced seasonal rotation of flock grazing to double plant density and production after only four years. And the stocking rates were essentially those applied by the herders themselves.

Other attempts to change the traditions of nomads have been disastrous, however.

"Attempted livestock programs have taken control of water from tribal elders in western Africa and given it to government officials, with chaotic results," says Riddell. "And the land around the government wells is the worst managed."

Riddell explains that under Islamic law people are allowed to water their herds once, and then they must move on. But anyone can use the government wells as much as they want. As a result, the land around the wells is badly overgrazed -- to the point that the resulting circles of deserts show up on satellite pictures.

Scientists at the conference were united in their emphasis on the need for a new model of range management for developing countries with nomadic populations.

The best hope for resolving the "pastoral crisis", according to Gilles, is first to accept that there is a contradiction between the survival of individual pastoralists and the long-term interests of range scientists and animal production specialists. Then a new form of pastoralism can be created to harmonize governmental goals and the economic needs of the herders.

There are no easy solutions to the desertification problem, and many scientists are coming to the realization that each locale may require a specific solution suited to the particular ecological and social milieu.

Nomadic people are frequently the poorest in developing countries. Governments' attempts to bring them some of the benefits of development such as schools, housing and medical care have either not been successful, or have meant the altering of their traditional lifestyle and the destruction of rangelands. There is evidence, for instance, that the Bedouins, who probably make up a quarter of the population of Saudi Arabia, are becoming economically marginal within the country despite the oil wealth.

Riddell says that it is no longer possible to look to the past for solutions to the present crisis.

"Young herders won't return to a system governed by the tribal elders. Either a new system will evolve, based on some type of local management that emphasizes fixed kinship units rather than fixed land units, or there will be chaos," he predicts.

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